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ATP11A Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP8755c

Specification

ATP11A Antibody (Center) Blocking Peptide - Product Information

Primary Accession P98196

ATP11A Antibody (Center) Blocking Peptide - Additional Information

Gene ID 23250

Other Names
Probable phospholipid-transporting ATPase IH, ATPase IS, ATPase class VI type 11A, P4-ATPase flippase complex alpha subunit ATP11A, ATP11A, ATPIH, ATPIS, KIAA1021

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8755c was selected from the Center region of human ATP11A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ATP11A Antibody (Center) Blocking Peptide - Protein Information

Name ATP11A

Synonyms ATPIH, ATPIS, KIAA1021

Function
Catalytic component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids, phosphatidylserines (PS) and phosphatidylethanolamines (PE), from the outer to the inner leaflet of the plasma membrane (PubMed:25315773, PubMed:25947375, PubMed:26567335, PubMed:29799007, PubMed:30018401, PubMed:36300302).

Does not show flippase activity toward phosphatidylcholine (PC) (PubMed:34403372). Contributes to the maintenance of membrane lipid asymmetry with a specific role in morphogenesis of muscle cells. In myoblasts, mediates PS enrichment at the inner leaflet of plasma membrane, triggering PIEZO1-dependent Ca2+ influx and Rho GTPases signal transduction, subsequently leading to the assembly of cortical actomyosin fibers and myotube formation (PubMed:29799007). May be involved in the uptake of farnesyltransferase inhibitor drugs, such as lonafarnib.

Cellular Location
Cell membrane; Multi-pass membrane protein. Early endosome. Recycling endosome. Endoplasmic reticulum membrane; Multi-pass membrane protein. Note=Efficient exit from the endoplasmic reticulum requires the presence of TMEM30A.

Tissue Location
Widely expressed (PubMed:26567335). Expressed in myoblasts (PubMed:29799007).

ATP11A Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

ATP11A Antibody (Center) Blocking Peptide - Images

ATP11A Antibody (Center) Blocking Peptide - Background

ATP11A is one of seven subunits of the human Arp2/3 protein complex. This subunit is a member of the SOP2 family of proteins and is most similar to the protein encoded by gene ARPC1A. The similarity between these two proteins suggests that they both may function as p41 subunit of the human Arp2/3 complex that has been implicated in the control of actin polymerization in cells. It is possible that the p41 subunit is involved in assembling and maintaining the structure of the Arp2/3 complex.

ATP11A Antibody (Center) Blocking Peptide - References

Volkmann,N., et.al., Science 293 (5539), 2456-2459 (2001)